

### **AMENDMENTS**

Please incorporate the following amendments into the subject application.

#### **In the Claims:**

1. **(Currently Amended)** A method for synthesizing a plurality of biopolymers comprising nucleotides at predetermined feature locations on a surface of a substrate, said method comprising:

producing a degenerate biopolymer feature location on said surface of said substrate by a method comprising providing a mixture of **two or more** different biopolymer ~~biopolymer~~ **biopolymer** subunit precursors to said feature location in at least one round of multiple rounds of subunit additions.

2. **(Previously Presented)** A method according to claim 1 wherein said biopolymers are polynucleotides.

3. **(Previously Presented)** A method according to claim 1 wherein said degenerate biopolymer feature comprises degenerate biopolymers that comprise a contiguous stretch of 1 to 5 degenerate nucleotides.

4. **(Currently Amended)** A method for synthesizing a plurality of biopolymers comprising nucleotides at predetermined feature locations on a surface of a substrate, said method comprising:

producing a degenerate biopolymer feature location on said surface of said substrate by a method comprising:

providing a mixture of **two or more** different biopolymer subunit precursors to said feature location in at least one round of multiple rounds of subunit additions, each round of subunit additions comprising:

- (a) dispensing from a dispensing system said biopolymer subunit precursors to said discrete sites,
- (b) dispensing activator to said discrete sites, and
- (c) repeating steps (a) - (b).

5. (Previously Presented) A method according to claim 4 wherein said biopolymers are polynucleotides.
6. (Previously Presented) A method according to claim 4 wherein said degenerate biopolymer feature comprises degenerate biopolymers that comprise a contiguous stretch of 1 to 5 degenerate nucleotides.
7. (Original) A method according to claim 4 wherein said biopolymers are oligonucleotides.
8. (Original) A method according to claim 4 wherein said dispensing system comprises at least one droplet dispensing device.
9. (Original) A method according to claim 4, which is a computer based method wherein steps (a) through (c) are carried out under computer control.

Claims 10-32 (cancelled).

33. (**Currently Amended**) A method for synthesizing a plurality of biopolymers comprising nucleotides at predetermined feature locations on a surface of a substrate, said method comprising:

producing a degenerate biopolymer feature location on said surface of said substrate by a method comprising:

- (a) dispensing from a dispensing system in at least one round of multiple rounds of subunit additions a mixture comprising a predetermined ratio of two or more different biopolymer subunit precursors for forming said degenerate biopolymers in a droplet manner,
- (b) dispensing activator to said discrete sites, and
- (c) repeating steps (a) – (b) to form said plurality of biopolymers comprising nucleotides at predetermined feature locations on said surface.

34. (Previously presented) A method according to Claim 33 wherein said biopolymers are polynucleotides.

35. (Previously Presented) A method according to Claim 33 wherein said degenerate biopolymer feature comprises degenerate biopolymers that comprise a contiguous stretch of 1 to 5 degenerate nucleotides.
36. (Previously Presented) A method according to Claim 33 wherein said biopolymers are oligonucleotides.
37. (Previously presented) A method according to Claim 33 wherein said dispensing system comprises at least one droplet dispensing device.
38. (Previously presented) A method according to Claim 33, which is a computer based method wherein steps (a) through (c) are carried out under computer control.
39. **(New)** The method of Claim 1, wherein said biopolymer subunit precursors are nucleotide precursors.
40. **(New)** The method of Claim 39, wherein said mixture of different biopolymer subunit precursors comprises nucleotide precursors corresponding to C, G, A and T.
41. **(New)** The method of Claim 1, wherein said biopolymer subunit precursors are monomers.
42. **(New)** The method of Claim 4, wherein said biopolymer subunit precursors are nucleotide precursors.
43. **(New)** The method of Claim 42, wherein said mixture of different biopolymer subunit precursors comprises nucleotide precursors corresponding to C, G, A and T.
44. **(New)** The method of Claim 4, wherein said biopolymer subunit precursors are monomers.
45. **(New)** The method of Claim 33, wherein said biopolymer subunit precursors

are nucleotide precursors.

46. **(New)** The method of Claim 45, wherein said mixture comprising a predetermined ratio of different biopolymer subunit precursors comprises nucleotide precursors corresponding to C, G, A and T.

47. **(New)** The method of Claim 33, wherein said biopolymer subunit precursors are monomers.

48. **(New)** The method of Claim 1, wherein said degenerate biopolymer feature location comprises degenerate biopolymers having less than 10 sites of degeneracy.